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MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.			CHOW, JEFFREY J	
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AUSTIN, TX 78767-0398			PAPER NUMBER	

2672

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/781,446

Applicant(s)

RADBURN ET AL.

Examiner

Jeffrey J. Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-79 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-79 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. UK 0303888.2, filed on 19 February 2003.

### ***Oath/Declaration***

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

Non-initialed and/or non-dated alterations have been made to the oath or declaration. See 37 CFR 1.52(c).

### ***Drawings***

## **INFORMATION ON HOW TO EFFECT DRAWING CHANGES**

### **Replacement Drawing Sheets**

Drawing changes must be made by presenting replacement sheets which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of the changes made must be presented either in the drawing amendments section, or remarks, section of the amendment paper. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). A replacement sheet must include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of the amended drawing(s) must not be labeled as "amended." If the changes to the drawing figure(s) are not accepted by the examiner, applicant will be notified of any required corrective action in the next Office action. No further drawing submission will be required, unless applicant is notified.

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Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and within the top margin.

### **Annotated Drawing Sheets**

A marked-up copy of any amended drawing figure, including annotations indicating the changes made, may be submitted or required by the examiner. The annotated drawing sheet(s) must be clearly labeled as "Annotated Sheet" and must be presented in the amendment or remarks section that explains the change(s) to the drawings.

### **Timing of Corrections**

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.85(a). Failure to take corrective action within the set period will result in ABANDONMENT of the application.

If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings MUST be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Reference number 374 in Figure 18.

The drawings are objected to the following informalities: Reference 326 is not a valid decision block. Suggestion is made to as "yes" and "no" to the paths where the decision is properly made.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

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prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it is essentially a repeat of claim 1 and claim 6 and not in narrative form and does not describe the disclosure sufficiently to assist

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readers in deciding whether there is a need for consulting the full patent text for details.

Correction is required. See MPEP § 608.01(b).

### **Content of Specification**

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

The disclosure is objected to because of the following informalities: the summary of the disclosure is not distinct from the abstract and should not include paragraphs that are word for word from the claims. Suggestion is made to delete paragraphs that are word for word from the claims and to provide information necessary to further explain the claims. Applicant is reminded that no new matter is allowed.

The disclosure is objected to because of the following informalities: There are no drawings of Figure 7, first mentioned on line 9 of page 23. Suggestion is made to specifically identify references to Figure 7.1 and/or Figure 7.2.

The disclosure is objected to because of the following informalities: the disclosure includes the following reference character(s) not mentioned in the drawings: Reference numbers 92, 94, 96, 98, 100, 102, 104, 106, and 110 is not in Figure 9 (lines 15-22 of pg 13). Reference number 490 (line 28 of page 34).

Appropriate correction is required.

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The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Examiner kindly request that the applicant also includes references to figure numbers when referencing reference numbers relating to figures to provide clarity and easy understanding of how the figures referenced are connected.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Method and system of tiling large images in a limited bandwidth environment".

***Claim Rejections - 35 USC § 101***

Claims 47 – 49 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. A carrier medium is too broad and vague and not all carrier mediums can store program instructions or computer program. Suggestion is made to use "computer readable medium" instead of "carrier medium".



***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 19, 41, and 68 are rejected under 35 U.S.C. 102(e) as being anticipated by Kenyon.

Regarding to dependent claim 19, Kenyon discloses a client 110, that may be an electronic device capable of performing the following: connecting to a map server via a communication medium 130, sending an identifier of a location, receiving back the map tiles from the map server, displaying the visible map tiles to the user and displaying a map of an area 290 comprising the request location 282 on the user display area 200 using the received map tile and rendering instructions (column 4, lines 44 – 53, column 5, lines 23 – 49 and Figures 1, 2A and 2B), which reads on the claimed client device responding to user selection at the client device of a location within the image field, wherein the image field is a map, to request from a

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server over a network, a plurality of image tiles, wherein the plurality of image tiles are plurality of representative of respective portions of the map, including a first image tile, wherein the first image tile is the first representative of respective portion of the map, that represents a portion of the image field, wherein the image field is a map, including the selected location and a plurality of further image tiles, wherein the plurality of further image tiles are plurality of further representative of respective portions of the map, that represent portions of the image field, where the image field is a map, surrounding the portion of the image field, wherein the image field is a map, represented by the first tile; receiving from the server via the network, the plurality of requested image tiles, wherein the plurality of requested image tiles are plurality of requested representative of respective portions of the map; and displaying at least a part of the first image tile, wherein the first image tile is a first representative of respective portion of the map, and further image tiles, wherein the further image tiles are further representative of respective portions of the map, on the display, wherein a total area of the first and further image tiles, wherein the first and further image tiles are first and further representative of respective portions of the map, exceeds the area of the display.

Regarding to dependent claim 41, Kenyon discloses a map server 300, determining which map tile represents the zone in which the requested location is contained 570 (column 6, lines 54 – 59 and Figure 5), which reads on the claimed server receiving one or more requests from a client device via a network. Kenyon also discloses the server sending adjacent map tiles 590, 592, and 594 (column 8, lines 28 – 40 and Figure 5), which reads on the claimed server supplying a plurality of image tiles, wherein the plurality of image tiles are plurality of respective portions of the map, representative of respective portions of the image field, where in the image

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field is a map, and including a first image tile, wherein the first image tile is a first respective portion of the map, representing a portion at the centre of the image to be displayed on the display and a plurality of further image tiles, wherein the plurality of further image tiles are plurality of further respective portions of the map, representing portions surrounding the first image tile, wherein the first image tile is a first respective portion of the map. Kenyon also discloses a client 110 displaying the visible map tiles to the user and displaying a map of an area 290 (column 5, lines 41 – 49) and also discloses the sending of second inner area will result in less of a likelihood of generating a request for additional data when panning (column 9, lines 11 – 27 and Figure 11), which reads on the claimed total area of the image tiles, wherein the image tiles are respective portions of the map, exceeds the area of the display at the client device.

Regarding to dependent claim 68, Kenyon discloses a client 110, that may be an electronic device capable of performing the following: connecting to a map server via a communication medium 130, sending an identifier of a location, receiving back the map tiles from the map server, displaying the visible map tiles to the user and displaying a map of an area 290 comprising the request location 282 on the user display area 200 using the received map tile and rendering instructions (column 4, lines 44 – 53, column 5, lines 23 – 49 and Figures 1, 2A and 2B), which reads on the claimed client device responding to user selection at the client device of a location within the image field, wherein the image field is a map, to request from a server over a network, a plurality of image tiles, wherein the plurality of image tiles are plurality of representative of respective portions of the map, including a first image tile, wherein the first image tile is the first representative of respective portion of the map, that represents a portion of the image field, wherein the image field is a map, including the selected location and a plurality

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of further image tiles, wherein the plurality of further image tiles are plurality of further representative of respective portions of the map, that represent portions of the image field, where the image field is a map, surrounding the portion of the image field, wherein the image field is a map, represented by the first tile; receiving from the server via the network, the plurality of requested image tiles, wherein the plurality of requested image tiles are plurality of requested representative of respective portions of the map; and displaying at least a part of the first image tile, wherein the first image tile is a first representative of respective portion of the map, and further image tiles, wherein the further image tiles are further representative of respective portions of the map, on the display, wherein a total area of the first and further image tiles, wherein the first and further image tiles are first and further representative of respective portions of the map, exceeds the area of the display.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 9, 12, 14 – 17, 23 – 27, 29 – 35, 38, 40, 45 – 58, 61, 63 – 66, 72 – 76, 78, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenyon in view of Cohen.

Regarding to independent claim 1, Kenyon discloses map tiles, but does not broadly disclose image tiles. Cohen discloses image tiles for any types of image sources, such as maps. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling, which gives users the flexibility to request and download any images of any size through a most efficient and quickest way possible to view these images.

Regarding to dependent claim 2, Kenyon also discloses a step the client requests additional map tiles when panning in a direction (column 10, lines 28 – 57 and Figure 13), which reads on the claimed client server requests each image tile and individually receive them.

Regarding to dependent claim 3, it is inherent that that the client device requesting which tiles it wants is the same as the client device indicating which tiles it wants.

Regarding to dependent claim 4, Kenyon also discloses the user typing an identifier of a request location and then the client will send to the server the identifier of the requested location and wait for the map server to send the appropriate map tiles (column 5, lines 23 – 33 and Figure

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2B), which reads on the claimed “client device identifies the location within the image field to the server and in response thereto the client device receives from the server the first and further tiles”.

Regarding to dependent claim 5, Cohen discloses a method of handling vector data (column 7, lines 10 – 58 and Figure 5), which reads on the claimed image is generated from vector data and the client device being operable to request vector data for forming an image tile from the server.

Regarding to dependent claim 6, Kenyon also discloses the client receiving back the map tiles from the map server and displaying the visible area of the map tiles to the user (Column 5, lines 44 – 46), which reads on the claimed “each image tile is displayed on the display as it becomes available”.

Regarding to dependent claim 7, Kenyon also discloses a flow chart that first determines which map tile to send containing the requested location 570 and 580, then determining which map tiles to send that are adjacent to the first map tile that was sent 590, 592 and 594 (Column 6, lines 54 – 67 and Figure 5), which reads on the claimed first image tile is received first.

Regarding to dependent claim 8, Kenyon discloses a first tile and immediate surrounding tiles (Figure 8), but does not specifically disclose it is within the area of the display. Cohen discloses plurality of tiles that are less than the area of the display. It would have been obvious to combine Kenyon’s system with Cohen’s teachings of displaying plurality of small tiles to the display, which will quickly display parts of the requested image instead of waiting for a huge tile to be downloaded before being able to be display.

Regarding to dependent claim 9, see Kenyon's system with Cohen's teachings of displaying plurality of small tiles.

Regarding to dependent claim 12, see Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling.

Regarding to dependent claim 14, see Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling.

Regarding to dependent claim 15, Kenyon discloses the user attempting to pan to an area that the client does not have in memory and the client requesting individual map tiles (column 14, lines 1 – 21 and Figure 11), which reads on the claim in its entirety.

Regarding to dependent claim 16, Cohen discloses a cache that holds image tiles (column 6, lines 11 – 16), which reads on the claimed client device is operable to hold received image tiles in a cache in the client device.

Regarding to dependent claim 17, Cohen discloses the analysis thread 324 comprises deleting old, unused tiles 326, analyzing the cache to find new tiles to add 328, adding the new tiles 330 (column 5, lines 26 – 34 and Figure 3), which reads on the claim in its entirety.

Regarding to dependent claim 23, Kenyon discloses point-of-interests that includes, but not limited to, museums, restaurants, theaters, shopping centers, and so forth, where these points-of-interests are user selected and information about these points-of-interests are displayed to the screen with their respective tile (column 11 – 13 and Figure 14a, 14b and 15).

Regarding to dependent claim 24, see Kenyon's system of point-of-interests.

Regarding to dependent claim 25, see Kenyon's system of point-of-interests.

Regarding to dependent claim 26, see Kenyon's system of point-of-interests.

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Regarding to dependent claim 27, see Kenyon's system of point-of-interests.

Regarding to dependent claim 29, Kenyon discloses a client that could be a mobile phone (column 5, lines 41 – 49).

Regarding to independent claim 30, Kenyon discloses map tiles, but does not broadly disclose image tiles. Cohen discloses image tiles for any types of image sources, such as maps. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling, which gives users the flexibility to request and download any images of any size through a most efficient and quickest way possible to view these images.

Regarding to claims 31 – 35, 38, 40, 45 – 58, 61, 63 – 66, 72 – 76, 78, and 79, see Kenyon's system in combination with Cohen's system.

Claims 18 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenyon in view of Cohen and Dziesletnik.

Regarding to dependent claim 18, neither Kenyon's system nor Cohen's system hold compressed and decompressed tiles in two caches. Dziesletnik discloses a patch cache 140 that holds decompressed patch data and a compressor that holds compressed patch data. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling and Dziesletnik's teachings of storing compressed patches or tiles in a cache or part of memory and decompressed patches or tiles in another cache or another part of memory to store as much compressed and decompressed data in memory and have them



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separated memory in a low memory environment, which would result in a faster processing time of quickly retrieving tiles from cache instead of requesting and redownloading tiles from the server.

Regarding to dependent claim 67, see Keyon's system with Cohen's teachings and Kadashevich's teachings.

Claims 28 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenyon in view of Cohen and Kadashevich.

Regarding to dependent claim 28, neither Kenyon's system nor Cohen's system return possible results of a user input location. Kadashevich discloses an apparatus that search for a collection of words based upon an input word and detect the occurrence of any of the words from a group of words, including the input word, and display the results. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling and Kadashevich's teachings of searching possible results of what the user is searching for to have Kenyon's system to display possible results of locations that the user is searching for, which gives users to choice the correct location desired just in case there are more than one possible location with the same name and/or information.

Regarding to dependent claim 77, see Keyon's system with Cohen's teachings and Kadashevich's teachings.

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Claims 20 – 22, 42 – 43, and 69 – 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenyon in view of Cohen and Huber.

Regarding to dependent claim 20, neither Kenyon nor Cohen disclose the use of scales. Huber discloses a zoom option, which changes the scale, based on user input, where a zoom level changes what level of details, which are contained in layers, are to be shown (column 4, lines 16 – 59) It is inherent that Huber's system can store the non-displayed layers into cache or request them from the server if they layers are not downloaded yet. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling and Huber's teachings of changing the scales and changing what should be displayed when zooming to allow Kenyon's system to have some kind of scale when zooming and to store unused data into the cache, which gives users an idea how big or small the area of interest is when zooming and to quickly retrieve data to display when zooming.

Regarding to dependent claims 21, 22, 42 – 43, and 69 – 71, see Kenyon's system with Cohen's teachings and Huber's teachings.

Claims 10, 11, 13, 36, 37, 39, 59, 60, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenyon in view of Cohen and Delorme.

Regarding to dependent claim 10, neither Kenyon nor Cohen disclose where tiles are first downloaded with low resolution then eventually downloaded to high resolution. Delorme discloses a global mapping system which organizes mapping data into a hierarchy of successive magnitudes, starting from a first or highest magnitude with lowest resolution and progressing to

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a last magnitude with highest resolution. It would have also been obvious to one of ordinary skills in the art at the time of the invention to further combine Kenyon's system with Cohen's teachings of handling all types of image format to process large image files by tiling and Delorme's teachings of displaying images at different resolution scale to allow Kenyon's system to first transfer tiles at lower resolutions then eventually transfer tiles at higher resolution, which reduce the wait time for users to see an image to the display, even though the resolution may be poor.

Regarding to dependent claims 11, 13, 36, 37, 39, 59, 60, and 62, see Kenyon's system with Cohen's teachings and Delorme's teachings.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey J. Chow whose telephone number is (571)272-8078. The examiner can normally be reached on Monday - Friday 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on (703)272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JJC

  
11/18/05  
RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600